App. F. IX-4

P 30 E

Previous References

1933.4
(Sgli)

File No. 56-33
Serial Nos. 7, 10, 13, 15

Later References
Sgli 17-34-6

Present

GENERAL AND REVENUE SECRETARIAT.

Serial Nos. Sgli

Part B for August 1934

SUBJECT.

Memorandum on the Sericulture Industry of the Mysore State.

F(13) To The Vice Chairman Imp. Cy Agl Research No D 4610 of 26-3-34 New Delhi

M Sweet 1934

FDR for necessary action.

Serial No.

Letter no. D4-232-33 dated 3rd February 1934 from the Dir. It. Communicating the Resolution passed by the Provincial Seri. Conference on 25.11.1933 that Sericulture might be included among the subjects that receive the Continuous attention of the Imperial Council of Agri. Research, and submitting for approval a draft of a letter to the Vice Chairman of Indian Institutions.

Subd for orders. if the Vice Chairman
10.7.2.34 of the Imperial Council of Agri Research may be addressed as if so Whether the draft of a letter sent up by the Director may be adopted. The proposal may be approved.

KPN
7.2.34

Dep Secy)

UO
8/2/34

2 The programme of the Imperial Council is already full and it is doubtful if they would be willing to add one item more to their activities especially when these activities concern only a portion of India.

3 If it should be decided that the letter should be sent a mere forwardal without any comment of the resolution of the Provincial Conference will, I think, do, to avoid the humiliation of their saying no to our proposal.

First Member.

cww.
9.2.34.

WD 0434—GPB—15,000—12-10-33

4 Let this be placed before the Member

cww. 10.2.34

UO 10/2

6194

NOTE—Contn. Sheet.

2/

2929
3125

DEWAN'S OFFICE
7 MAR. 1934
No. 5662

File No. Secl of 193 .

General and Revenue Secretariat

Serial No.

5 Draft. Sanctd
Ks. 23.2.34. Secl
Ltr
Ltr 1/2/34 UO
15/2

6 Discussed with Dir. Revenue
send a revised draft
21/2
UO
21.2.34
UO
21/2

7 The revised draft sent recd. from the Dir. is sanctd
Ks. 23.2.34 Dev Secy) UO 23/2

First Member
UO
26.2.34 UO
may be submitted to the Dewan 26/2
for approval
Dewan's
Sec
6/3/34
UO
6.3.34.
UO
7/3/34

7-3-34
Secl UO 8.3.34.
8/3/34

Letter No. D. 4610 dt 26-3-34 to the Vice-Chairman
Imperial Council of Agri. Research, New Delhi
Sds. the resolution for necessary action.

13

To
P.A. to the I Member of Council, with compliments
Cb 20/2

Sanctd
22/2/34

OFFICE OF THE FIRST MEMBER
27
No. 6657

GEN. & REV. SECT.
TYPING SECTION
9 MAR. 1934
GENL & REV. SECT.

DEVELOPMENT BRANCH
29.3.34.

General and Revenue Secretariat | File No. Seri 5 6 of 1933 | [App. F. III—

Serial No.

15 Letter no D·2747/34/A dy 4th August '34 from the Secy, Imperial Council of Agri. Research, Simla expressing regret that Sericulture cannot be brought within the Scope of the Imperial Council of Agri. Research, though the Council would be represented on the proposed Imperial Sericultural Committee. Should be perused, with reference

14·10·8·34
CB

Dev Secy) WD 10/8/34

~~What attitude to be taken~~

Forwarded MW. 13.8.34.

WD 13/8

ku
14/8

MW 14.8.

WD 15/8/34

Forwarded

Dewan

MW. 16.8.34.

WD 16/8

Mo
17-8-34

MW. 17.8.34.

WD 20/8

924 AUG. 1934 SECRETARIAT

OFFICE OF THE FIELD MARSHAL 13 JULY 1934 No. 1173

886

16-8-34

NOTE—Contn. Sheet.

WD 01955—GPB—22,500—12-6-34

Seri 56-38-7

Telegraphic Address.—"INDUSCOM."

GOVERNMENT OF MYSORE.

DEPARTMENT OF INDUSTRIES AND COMMERCE.

In reply please refer to
No. Dy. 232/33-34
Encl. Two.

OFFICE OF THE DIRECTOR,
Dated, Bangalore, 2nd February 193 4.
3

FROM A. V. RAMANATHAN, Esq., B.A.,
~~N. RAMA RAO, Esq., B.A., B.L.,~~
Director of Industries and Commerce in Mysore,
Bangalore, (India.)

To

S. ABDUL WAJID, ESQ., B.A.,
Secretary to the Government of Mysore,
Development Department,
Bangalore.

SIR,

I have the honour to state, for the information of Government, that the Provincial Sericultural Conference held at Channapatna on the 26th November 1933 passed a resolution to the effect that Sericulture might be included among the subjects that are receiving the continuous attention of the Imperial Council of Agricultural Research. The President of the Mysore Silk Association has forwarded me a copy of the resolution and has requested me to take necessary action in the matter.

Having regard to the economic importance of the Sericultural Industry not only in Mysore but also in Kashmir, parts of Bengal and Madras, it is desirable that the Sericultural Industry should receive the attention of the Imperial Council. The Government of India have recognised the importance of the industry by referring it to the Tariff Board for enquiry and recommendation in view of the fierce competition to which it is exposed from the Imports of raw silk from foreign countries. I am submitting herewith copy of draft letter that may be sent to the Vice Chairman of the Imperial Council of Agricultural Research, and request that Government may kindly be moved to address the Vice-Chairman in the matter.

I have the honour to be,

Sir,

Your most obedient servant,

A. V. Ramanathan
DIRECTOR.

BV2

Mas

Superseded by a revised draft sent with D. 31251 dt 21.2.34

To

The Vice Chairman,

Imperial Council of Agricultural Research,

NEW DELHI.

Sir,

I am directed to state, for your information, that the Provincial Sericultural Conference held at Channapatna on 26-11-1933 passed the following resolution:-

'This Conference requests the Government of India to include Sericulture in the subjects of research in the Imperial Agricultural Research Council'.

Sericultural Industry plays an important part in the economic life of the Mysore State. Directly or indirectly it provides employment to about 2 lakhs of families. This industry is also practised in Kashmir, Assam and parts of Bengal and Madras. In recent years, the Industry has been much affected by the imports of raw silk from foreign countries at steadily declining prices. The importance of improving the conditions of the industry has been recognised by the Government, of India. They were pleased to refer to it to the Tariff Board for enquiry and recommendation. Though it is some time since the Tariff Board submitted their report to the Government of India, their orders on the report have not yet been passed. In the meanwhile, the condition of the industry has been steadily growing from bad to worse.

This has to be urged, in view of the recommendations of Tariff Board, since. WO 2

The industry is capable of considerable expansion. A well established Sericultural Industry is a national asset. The Memorandum on Sericulture sent

herewith furnishes information regarding the activities of the Government Sericultural Department in Mysore. It is very desirable that Sericulture is included among the subjects that receive the continuous attention of the Imperial Council of Agricultural Research. There are several directions in which the activities of the Imperial Council would prove of immense benefit to the Industry. Reference may be made to the improvement in the cultivation of mulberry, fixation of new cross breeds, standardisation of reeling, grading of silk, establishment, institution of conditioning houses etc.

I therefore request you to kindly take necessary action in the matter.

I have etc.,

/

Secretary to Govt.

Development Department.

Memorandum on the Sericulture Industry of the Mysore State.

MEMORANDUM ON THE SERICULTURE INDUSTRY OF THE MYSORE STATE.

Extent and distribution.

The Silk Industry of Mysore has been in existence for over a century and is practised in the Districts of Bangalore, Mysore, Tumkur and Kolar in about 2,500 villages out of 19,000 villages in the State. Sericulture is the largest and most important cottage industry in the State, and fits in admirably with agriculture which is the main occupation. It is practised by small agriculturists as a subsidiary occupation, and affords profitable and steady employment throughout the year for women and children at home and gives occupation to the raiyats during agricultural off seasons. A well established mulberry garden withstands drought better than field crops, and in bad years, rearing silk worms has often saved entire taluks from acute general distress consequent on insufficient rainfall. This industry undoubtedly gives economic stamina to the population practising it. The returns from the silk industry are absolutely necessary for the subsistence of a large portion of the population in the State. Cultivation of mulberry, rearing of silk worms, reeling of silk, marketing of silk and weaving of silk give occupation to a large number of families. In addition to the people directly engaged in the industry, a large number of families find employment in such subsidiary operations connected with sericulture as plucking leaves, digging, weeding, pruning and manufacture of appliances in sericultural villages. It is difficult to make an accurate estimate of the number of families indirectly benefited by this industry, but it may be safely said that in sericultural villages there is hardly any family which does not contribute to the industry at one stage or another and the result is that sericultural villages are ordinarily more prosperous and show more of alertness and life than others.

Taking into consideration the total area under mulberry, the exports of raw silk from the State and the number of handlooms devoted to the weaving of silk fabrics, it may be roughly estimated that the Silk Industry in its several branches gives occupation to about two lakhs of families in the State under normal conditions. By cultivating mulberry over an acre of dry land and rearing silk worms with the leaf obtained from the mulberry garden, the sericulturists obtain on an average about Rs. 200 per year during normal times. It is difficult to estimate the average earnings at the present time as the demand for cocoons and raw silk is very limited, and this is reflected in the earnings. The reeler during the working season makes from eight annas to ten annas per working day. The weaver earns from Rs. 20 to Rs. 35 per month. The amount earned per day by other classes of labour as that engaged in digging the soil, pruning the garden, plucking the leaves, etc., varies from place to place, round about Re. 0-3-0 for boys and women and Re. 0-6-0 for men. The earnings of the middlemen engaged in the trade in cocoons, raw silk and finished silk fabrics obviously vary according to individual capacity, but may be taken at somewhere between Rs. 10 and Rs. 50 a month.

Organisation, management, finance and marketing.

The Sericultural Industry properly so called comprises all operations from the cultivation of mulberry to the marketing of raw silk. These operations may be grouped as follows:—

1. Mulberry growing and silk worm rearing.
2. Silk reeling.
3. Trade.

The rearing of worms is carried on side by side with the cultivation of mulberry. The rearer as a rule grows his own mulberry, and it is rarely that mulberry is grown for sale, though occasionally surplus leaves or surplus worms are sold to neighbours who require them. Generally, mulberry is raised over small plots of land ranging from half or three-fourths of an acre to ten acres. It is grown both as a dry crop and as an irrigated crop. The principal capital investment required in sericulture is the mulberry garden; the rearer's other capital requirements are few. His house is his place of work and his wife and children furnish the labour required. This is what makes sericulture a perfect home industry. It

days, they are fed once in two hours and require very careful attention. By the end of this period, they will have grown sufficiently to be fed with slightly more mature leaves cut to a larger size. In about thirty days from the date of hatching, the Mysore worm will be ready to spin its cocoon. No feeding is necessary at this stage. The ripe worms are mounted on 'Chandrikes' or spinning trays where each worm builds a cocoon around itself. Three days later, the cocoons are removed from the 'Chandrikes' and are ready for sale. The hybrid worm forms a cocoon in about 25 days after hatching.

During the larval stage, the worm casts off its skin, four times, growing bigger and bigger after each moult. As worms grow bigger, they require larger space and over-crowding has to be avoided. Bamboo trays are used for rearing the worms and the trays are kept one above the other on stands. It is very necessary that the rearing room should have sufficient light and ventilation. The worms should be protected against the attacks of ants, lizards, rats, etc. During the rearing, worms develop so rapidly that young worms which occupy one tray will occupy 20 trays when they grow to maturity. After the fourth moult, the worms eat for ten days and during this period, they consume five times the quantity of leaf consumed during the preceeding 20 days. Entire leaves may be fed to the worms after the fourth moult. For details, reference is invited to the Hand Book of Sericulture by Messrs. N. Rama Rao and M. Yonemura.

Mulberry cultivation.

Three varieties of mulberry are grown in Mysore, *viz.*, Boodi Kaddi, Yennerangina Kaddi and Sultani Kaddi. The last named variety which yields very small leaves and which requires heavy manuring has practically disappeared. The other two varieties are grown all over the silk area. Several new varieties have been introduced by the Sericultural Department with promising results and the best of them will ultimately be distributed for wide propagation.

Mulberry is a deep-rooted plant and yields leaf for over 15 years when once it is planted. It is generally propogated by means of cuttings and is grown in the form of bushes. The initial expenditure for planting a new mulberry garden is from Rs 75 to Rs. 100 per acre. Mulberry is grown both on dry land and on irrigated land. In the case of dry cultivation, the plant depends upon rainfall for water supply. Irrigated gardens get their water supply either from tanks, shallow wells along river banks or deep wells. The plants are pruned once a year. The cultural operations comprise digging, manuring, weeding, etc., and have to be attended to at fixed intervals. Generally, gardens are given a digging after harvesting a crop of leaves. Manure is applied either once or twice a year. Farm yard manure, silk-worm litter and artificial manures such as ammonium sulphate and groundnut oil cakes are used.

The first crop of leaves after pruning is plentiful and the leaves are of good quality and size. These leaves would be ready for harvesting in about two or two and half months after pruning. As the worms take one month from start to finish, the leaves would be completely harvested in three or three and half months after pruning. The next crop of leaves will be ready for harvest in about a month. Generally, four to five crops of leaves are harvested from the rainfed gardens and six to seven crops from irrigated gardens. The size and yield of leaves would diminish after each harvest. The irrigated gardens yield leaf during summer months also. These gardens have to be protected against the depredations of cattle. The rainfed gradens do not yield any leaves during summer.

The system of planting mulberry gardens and of harvesting leaves varies with each locality. In Kolar and parts of Bangalore District, the mulberry cuttings are planted close together in lines one foot apart to prevent wastage of water and the plants are cut down to the root at each harvest. In other parts, the mulberry is planted in pits nine inches apart and the rows are about two feet apart. Only the leaves are plucked off the twigs at each harvest and the plants are pruned to the ground once a year.

Crops.

Roughly one acre of rainfed mulberry garden yields about 6,000 lbs. of leaves in a year and the cost of cultivation would amount to Rs. 84 per year. An acre of irrigated garden yields 10 to 15 thousand pounds of leaves per year, the yield depending upon the quantity of manure applied and the cultural operations carried on. The cost of cultivation in this case varies from Rs. 130 to Rs. 200 per annum.

may sometimes happen that he requires some money and this he usually borrows for short terms from the reeler who is the prospective purchaser of cocoons. It is, however, rarely that the money is required for sericulture. It is more often wanted for other purposes, social or agricultural, the agriculturist is frequently in need of cash between harvest and harvest and sericulture only gives him credit-worthiness. The Sericultural Co-operative Societies have also begun to assist him to some extent. As soon as the cocoons are ready, the rearer sells the same to the dealer in cocoons and receives the amount due to him less the advances, if any, received from the dealer. In normal times, when the trade is brisk, he usually gets ready money against the delivery of the cocoons. When trade is dull, it is sometimes necessary for him to allow time to the reeler to reel the cocoons and sell the silk.

The reeling establishments are located all over the silk tract. The smallest unit is a *Charka*, consisting of one basin and one reel, and a large number of establishments are of this size; but there are also a fair number of larger establishments consisting of anything from 5 to 30 reels. The reeler sometimes makes his own arrangements with the rearer of worms for the supply of green cocoons, but the usual practice is to purchase through a middleman or broker who receives a commission of about two annas per 12 lbs. and the reeler has also to bear the cost of transportation of the cocoons to his place. This varies, according to the distance to be covered, from one anna to two annas per 12 lbs. The silk reeled off the cocoons is converted into hanks and disposed of to the merchants either locally or in distant centres of trade. The reeler generally gets advances from the merchants dealing in raw silk and on these advances, he pays interest ranging from 10 to 12 per cent. He has to give a commission of one and a half annas per pound. When the trade is brisk or if the merchants have already booked forward orders, the reeler gets cash againt the delivery of raw silk. When the demand is slack or if the merchant has not got any orders on hand, the reeler will have to wait till the raw silk deposited by him with the merchant has been sold. When it is finally sold, the amount realised less the advance and interest accruing on it is adjusted to his account.

The owner of the silk *koti* is partly a merchant and partly a broker. The capital invested by him is family capital supplemented with capital borrowed from a private banker or a joint-stock bank. The merchant gets raw silk from the reelers in the interior. He makes advances to the reelers and charges them interest on such advances ranging from 10 to 12 per cent. He gets a commission of one and a half annas per pound from the reelers and an equal amount from his customers in different places. He sends out silk in bales of 70 lbs. on an average. Time given to the buyer depends upon his financial standing. Generally, the merchant insists upon an early payment. Interest is charged in some cases, the rate varying from 8 to 12 per cent.

Mysore silk worm.

Mysore has a distinct race of silk worms. These worms are multivoltine, feed on mulberry leaf and produce greenish cocoons, which yield a beautiful lustrous silk of excellent quality. The silk worm reared in Mysore is indigenous to Mysore. Of late, hybrids between pure Mysore and pure Japanese or Chinese races are also being reared by the sericulturists; but these form a very small part of the total seed supply. Though hybrid seed is 40 per cent more profitable to rear than the pure Mysore seed, yet since the manufacture of such seed requires great skill and care and special equipment, only Government Grainages at present issue it, and it will be sometime before the work can be transferred to aided or private grainages. This is one of the potential directions in which silk production could be increased and the cost reduced; but it necessarily takes sometime. The cocoons produced by these hybrids are used for reeling only. The pure Chinese and Japanese races used for the preparation of hybrid layings are univoltines and bivoltines. These races are bred pure by the Sericultural Department for seed purposes and no deterioration has been noticed in the stock after several years of continuous rearing but small quantities of fresh seed are also imported from time to time for reinforcing and replenishing the stock.

Rearing.

The raiyat or the rearer purchases seed cocoons or disease free layings. It takes about ten days for the eggs to hatch and during this period, they are kept at the ordinary temperature of the rearing house, care being taken to protect them from the attacks of lizards, ants, etc. The young worms, so soon as they hatch out, are fed with tender mulberry leaves cut into very fine pieces. During the first ten

Four to five broods are reared in a year from rainfed gardens and six to seven broods from irrigated gardens.

Generally, about 140 Mysore Layings weigh one ounce. These produce about 27,500 cocoons or 50 lbs. of cocoons.

About 97 per cent of the cocoons produced in the State are used for reeling and three per cent for seed purposes. The seed cocoons required by the Kollegal Taluk of the Madras Presidency are supplied from the Mysore area.

Cost of production of cocoons.

The average cost of producing cocoons per unit of 25 lbs. (Local Maund) is shown below:—

	Rs.	a.	p.
(*a*) Cost of seed—70 layings	0	8	6
(*b*) Cost of food for worms—400 lbs. leaves at 2·7 pies per lb.	5	8	0
(*c*) Cost of appliances as trays, stands, chandrikes, etc.	0	5	4
(*d*) Cost of extra labour for plucking the leaves after the fourth moult.	1	4	0
(*e*) Miscellaneous	0	3	0
	7	12	10
or	7	13	0

Cost per lb. of cocoons 125/25 = 5 annas.

N.B.—Generally the members of the family attend to the plucking of leaves, till the worms pass the fourth moult, as the quantity of leaves required up to that stage is very small. The feeding of the worms in all the ages is attended to by the members of the family in addition to their household duties.

A portion of the dwelling house is utilised for rearing the worms. The capital investment in the business is very little. The rearer has to find ready money only for the purchase of seed.

The details of cost of production as furnished above do not include provision towards rent. The excess, if any, in the price realised over the cost of production of cocoons constitutes the remuneration for the labours of the family.

Reeling.

The cocoons are at present sold at an average price of five annas per lb. The cocoons are not reeled by the rearer himself but are generally sold to professional reelers who reel the silk and sell the same in silk centres.

In Mysore the following kinds of reeling machines are used for producing raw silk:—

1. Indigenous Country Charka.
2. Mysore Domestic Basin.
3. French and Italian Filature Basin.

The Charka and the Domestic Basin are worked entirely by hand. In the filatures the reels are run by power, but the actual reeling work in all the machines is done by hand.

There are in Mysore about 4,000 country charkas, 130 Mysore Domestic Basins and about 70 Filature Basins. The Filature Basins and the Mysore Domestic Basins are capable of producing about 71,000 lbs. of high grade silk per annum. The rest of the silk is produced in country charkas. The cost of production of one lb. of silk with the three appliances specified above is as follows:—

Country Charka—about Rs. 6 per lb. exclusive of depreciation, interest on capital and owner's remuneration.

Mysore Domestic Basin—Rs. 7-14-0 per lb. do do

Government Silk Filature—Rs. 8-12-0 per lb. includes overhead charges.

The details of the cost are given in Annexure I.

The following statement shows the area under mulberry, the estimated total output of raw silk and silk waste together with their values during the past six years:— Total production of raw silk and silkwaste.

Year	Total area under Mulberry (acres)	Production of raw silk		Production of silk waste	
		Lbs.	Value	Lbs.	Value
			Rs.		Rs.
1926-27 ...	53,483	11,60,000	1,10,20,000	5,80,000	5,80,000
1927-28 ...	50,194	10,00,000	90,00,000	5,00,000	2,50,000
1928-29 ...	46,312	9,20,000	73,60,000	4,60,000	2,30,000
1929-30 ...	43,624	8,80,000	69,30,000	4,40,000	2,20,000
1930-31 ...	42,881	8,60,000	51,60,000	4,30,000	1,07,500
1931-32 ...	36,511	7,40,000	41,62,500	3,70,000	92,500

The following statement shows the total quantities and values of raw silk and silkwaste exported from the State during the last six years:— Exports.

Year	Export of raw silk		Export of silk waste	
	Quantity In lbs.	Value In lakhs	Quantity In lbs.	Value In lakhs
		Rs.		Rs.
1926—27	746,692	66·87	613·278	6·10
1927—28	670,760	58·01	480·848	2·25
1928—29	619,650	52·30	493·394	2·50
1929—30	552,844	42·68	462·890	2·27
1930—31	383,440	23·13	234·720	0·59
1931—32	367,440	22·20	266·560	0·67

A portion varying from 36 to 40 per cent of the raw silk produced in the State is used up locally. The balance of the raw silk is sold outside the State, but still in India, and all the silk waste is exported abroad.

The principal centres of trade in raw silk are Bangalore, Channapatna, Siddlaghatta and Chikballapur. The bulk of the trade passes through Bangalore City, where there are a number of silk 'Koties' which specialise in trade in raw silk. The owner of the 'Koti' gets raw silk from the reelers in the interior. The reeler deposits the raw silk manufactured or collected by him with the owner of the 'Koti' and obtains an advance from him amounting from 50 to 75 per cent of the total value of raw silk so deposited. On this advance, interest is charged at rates varying from 10 to 12 per cent. A commission of one anna per seer of 26½ tolas is charged by the 'Koti' owner to the seller, *i.e.*, the reeler. Sometimes large customers from consuming centres also employ brokers to assist them in getting silk from the silk 'Koties.' For the services rendered by the brokers, a commission of two to four annas per seer called 'Gootum' is charged. The brokers also arrange, if required, for the purchase of silk on credit from the 'Koties.' There are five such brokers in Bangalore, and their services are availed of largely by customers from Gadag, Hubli, Dharwar, Bhagalkote, Shapur, Belguam, Guladagudda, Bettigere, Kanchi and Salem. Market.

The 'Koti' owner sends quotations to customers in different centres of trade outside the State. As soon as an order is received a consignment is made and forwarded to the purchaser. The silk is sent out in bales of 70 lbs. or 105 to 108 seers of 26½ tolas each. The purchaser has to give a commission of one anna per seer. When credit is allowed, he is charged interest at the rate of 10 to 12 per cent from the date of consignment. Generally, the 'Koti' owners realise their dues as early as practicable. Money is received by means of insured letters. So soon as the amount is received, it is credited to the account of the reeler and the advance made to him is adjusted out of it.

Most of the silk waste produced in Mysore is exported through Madras or Bombay. The exporting houses have their agents all over the State, and these men generally go about the villages where charkas are working, collect all the silk waste and send it by rail. The agents are sometimes placed in funds by the exporting houses for making advances to the reelers. There are, in addition, a few dealers who collect the waste on their own account and sell it to the exporting houses. Money is realised against the despatch of the rail receipts.

Extent to which the industry is affected by the increase in imports.

The decline in the exports of raw silk from the State and the shrinkage in the area cultivated under mulberry (*vide* tables given above) indicate the extent to which Mysore sericulture has been affected by the competition of raw silk imported from foreign countries It is ascertained that the Mysore silk has lost its market in several of the most important centres of weaving in the Madras and Bombay Presidencies, Hyderabad and the United Provinces. Mysore silk of fine deniers was till recently much in demand in India at Banares, Surat, Belgaum, Gadag, Bagalkote, Hyderabad, Kumbakonam and Conjeevaram, among other places. It has been the experience of Mysore merchants that the imports of foreign raw silk at steadily declining prices have not only captured their Indian market but have also encroached upon their domestic market. In Bangalore City alone, out of a total daily consumption of about 135 lbs. of silk, about 100 lbs. now consist of imported foreign silk. The natural result of the influx of phenomenally cheap foreign silk has been an unprecedented fall in the price of Indian raw silk. At present, the price of raw silk (Charka) is about Rs. 6 as against Rs. 14 per lb. in 1922. It is considerably below the price obtaining in the pre-war year which was Rs. 7-8-0 per lb. That the fall in the price of silk is not due to the general depression, but solely to the disastrous competition of foreign silk will be borne out from the statement enclosed herewith as Annexure II, showing the index numbers of the wholesale prices of commodities in Bangalore and the index numbers of the price of raw silk. The general level of prices of all commodities is seven points above the level of the pre-war year in last September, while the price of raw silk is 36 points below. The rate of fall in the price of raw silk has been more rapid since July 1930. There was some recovery in the price during the latter part of the year 1931 but this was only temporary lasting for only four months. Since January 1932 the price of raw silk has been suffering a steady fall.

The present price of silk is well below the cost of production carried on under normal conditions. If the present prices continue, the industry is doomed, and even now, it is rapidly going out except in places where there are special facilities for production. Since 1926-27 about 17,000 acres (or 32·2 per cent) have gone out of mulberry, each acre going out representing a capital loss of about Rs. 100 to Rs. 150. The decline would have been more rapid but for the deep roots which this long established industry has taken in a poor and conservative population, and the inability of the workers to find an alternative source of employment. These retarding causes only serve to prolong the agony of disappearance and make it more pitiable. The only remedy is relief from the strangling pressure of foreign competition.

The economic importance of the industry.

The industry is of great economic importance to the State. In some form or other, it provides employment under normal conditions to about two lakhs of families. The well-being of nearly a sixth of the total population of the State depends on this industry. In the rural economy, sericulture plays a very important part. The cultivation of mulberry and the rearing of silk worms afford a subsidiary occupation, which enables the family of the agriculturist to turn its waste time to account; and earn a return which in many cases makes all the difference between a half starved life, without any hope of improvement, and a self respecting competence. The capital invested in the business is small and the spare time of the raiyat is usefully employed. Persons who cannot otherwise participate in production on account of health, age or social customs can pursue the industry to considerable advantage. It is a matter of primary importance that in a rural country there should be as many occupations of a varied character as possible. Silk worm rearing and silk reeling come in handy as a suitable occupation especially as nature has provided the people with advantages in climate and economic environment. A prosperous sericulture has a vital bearing on the stability and progress of the silk hand weaving industry. The trade in silk and silk fabrics has created an organisation which has vested interests, and has great potentialities of

service. All these suffer with sericulture, and will be involved in its fall. If the industry is to be saved, it has to be protected against the ruinous competition of raw silk from China and Japan. It has already suffered great damage, but with immediate relief, its natural recuperative powers will enable it to make a speedy recovery.

It seems probable that as a result of the contraction of their principal market due to the depression in America, China and Japan are directing their efforts to securing a market in India. There is no doubt that the depreciation of Chinese and Japanese money has been a factor favourable to the portentous growth of imports. It is probable that foreign silk is being sent to India at prices below cost in the countries of production. This sacrifice may be an effort of despair, or it may be sustained by the hope that if Indian sericulture is once killed—as killed it must be if this onslaught should continue unchecked—then China and Japan would have the Indian weaving industry at their mercy, and could recompense themselves by raising prices safe from competition. It would be unreasonable to expect that the Indian silk weaving industry would long survive Indian sericulture. To protect the industry adequately, duties should be imposed on foreign raw silk, as well as prepared silk such as noils, warps and yarns and also on silk fabrics. It is quite obvious that a duty on raw silk without a corresponding duty on the silk manufactures coming into the country would be futile. Exception may, however, be made in the case of articles which cannot at present be manufactured in India, but so soon as the local manufacture of such articles becomes possible, adequate protection should be extended also to them.

Policy of Government.

Government have been bestowing their attention on the development of the industry. A separate Department of Sericulture has been organised and the annual expenditure on the department has gone up from Rs. 70,000 to Rs. 1,25,000. The administration reports of the department supplied to the Tariff Board give an idea of the nature and extent of the activities of the department. The policy of Government is :—

1. To gradually eliminate the loss of crop due to bad seed.
2. To increase the yield of cocoons by introducing improved breeds of worms, and popularising more efficient rearing.
3. To improve methods of reeling.
4. To reduce cost of mulberry by introducing superior varieties of mulberry, and popularising better methods of cultivation.
5. To pioneer and expand the utilisation of Indian silk in the manufacture in India of superior fabrics which are being imported at present.

Action is being taken on all these lines, and very encouraging results have been obtained, due to the fact that most of our soils are suitable for mulberry and our climatic conditions are generally favourable for rearing silk worms. There is thus practically unlimited scope for expansion. It is a conservative estimate that under normal conditions, the output of silk could, in a few years and with the efforts that are now being made, be increased to three times its present volume, and its quality improved so as to have nothing to fear from foreign competition. The improvements that are being gradually introduced in all the operations comprised in sericulture are bound to bring about a considerable reduction in cost. This policy is being steadily pursued; but when regard is had to the extent of the industry and the nature of the people who find employment in it, it will be realised that improvement is a question of time and protection. Time is required to push the improvements into the homes of the workers, and protection is necessary to prevent the industry from being killed by foreign attack before efforts at improvement have borne fruit. There is no doubt that given adequate protection, in about 15 years, the Indian industry will have grown sufficiently large to supply the Indian demand and sufficiently strong to defy foreign competition.

Hand loom weaving industry: Effects of the rise in the price of silk.

The Indian demand for silk is not only the demand for raw silk from the weaving industry of India, but also the demand of the Indian consumers for silk fabrics woven abroad. India imports at present about 19,900,000 yards of silk fabrics, chiefly from China and Japan, representing a value of a crore and fifty eight lakhs of rupees. These goods are mostly Crepes, Georgettes, Taffetas and Satins, which were not hitherto being manufactured in India. A year ago, as the result of careful investigation, a pioneer weaving factory was started at Mysore, and the experience of

work there makes it certain that the fabrics which are at present being imported can be manufactured in India at a profit and in qualities which lose nothing by comparison with those foreign goods. There can be no doubt that the pioneering and development of the manufacture of high class silk fabrics in India which could displace foreign goods will greatly widen the scope for sericulture, adding what is practically a new province to the Indian weaving industry, and enriching the economic life of the country by providing fresh fields of employment.

In the Mysore State, weaving of silk fabrics on handlooms is carried on largely in Bangalore, Nelamangala, Magadi, Dodballapur, Hole-Narsipur, Molakalmuru, Gudibanda and Mulbagal. Except at Dodballapur and on a few looms at Bangalore, the weavers were formerly using exclusively Mysore silk yarn. In Bangalore and Dodballapur, however, weavers have recently taken to the use of imported Chinese Yarn and to this extent the latter has displaced local silk yarn. The number of silk looms working in the State is estimated at 8,000. Some six years ago, when the imports of foreign silk were normal, both in quantity and price, there were about 6,000 looms. An appreciable part of the increase has taken place in recent months. It seems obvious that this increase is almost entirely due to the large quantity of unprecedentedly cheap foreign silk now available to the weaver, which enables him to place on the market silk cloth at prices within the reach of even the poorer classes of customers. Whereas a saree of the pattern known as "Arlepet", used to sell formerly at prices ranging from Rs. 60 to Rs. 80, a very similar article made of imported silk now sells at anything between Rs. 30 and Rs. 40. This fall in price creates a demand for Arlepet sarees from people whose means did not permit them to buy the article at the former price. Since there has been no increase in the total number of looms, it is evident that the increase in the number of silk looms has been secured by the conversion of cotton looms to silk. The conversion of cotton *looms* and of cotton *users* to silk as the result of a ruinous invasion of foreign silk cannot be considered a permanent or healthy development; but one encouraging fact seems obvious, namely, that in the weaving industry a certain amount of adjustment is possible and that weavers displaced from one kind of weaving can turn their hands and appliances to another.

The result of effective protection for silk yarn will necessarily be to raise the price of silk and consequently of silk fabrics. This is bound to bring about a contraction in the demand for silk fabrics, possibly to the same extent to which there has been an expansion in recent years owing to the influx of foreign silk. It may not be unreasonable to expect that the number of looms engaged in weaving silk goods will go back to a figure round about the former one of 6,000. This contraction need not, however, lead to any great distress, because just as cotton looms have been converted into silk looms now, silk looms might be reconverted to cotton looms in the future, provided of course, that the increased demand for high class cotton fabrics, which would be a substitute for the low priced silk goods, is not in the meantime allowed to be met by foreign imports of superior cotton fabrics. From this reasoning, it seems probable that a protective duty on silk yarn would not unduly affect the hand weaving industry, if protection is afforded, firstly, against foreign silk fabrics and secondly (and to a less degree) against high class foreign cotton fabrics which might be substituted for silk fabrics. It may perhaps be added that the contracted market for silk fabrics of which an index would be the probable decrease in the number of silk looms from 8,000 to 6,000 would be a firm and steady market and not one which depends for its existence on adventitious conditions brought about by unnatural causes.

BANGALORE,
Dated 9th January 1933.

N. RAMA RAO,
Director of Industries and Commerce.

ANNEXURE I.

I. The cost of cultivation of one acre of rainfed mulberry garden per annum.

		Rs. a. p.	Rs. a. p.
1.	Land Revenue		1 12 0
2.	Manure		25 0 0
3.	*Labour*.—Digging	35 0 0	
	Weeding	10 0 0	
	Manuring	4 0 0	
	Pruning	5 0 0	
			54 0 0
4.	Miscellaneous		3 0 0
			83 12 0
			or Rs. 84

The average production of leaves per acre of land is about 6,000 lbs. costing as above Rs. 84. This works out to about 2·7 pies per lb. of mulberry leaves.

II. Cost of production of cocoons from leaves of one acre of rainfed mulberry garden per year.

		Rs. a. p.
1.	Cost of silk worm seed	7 14 0
2.	Cost of food for worms— Cost of mulberry leaves	83 12 0
3.	Cost of appliances as trays, stands, chandrikes, etc. ...	5 0 0
4.	Cost of extra labour for plucking leaves after fourth moult	18 12 0
5.	Miscellaneous	2 13 0
		118 3 0

If all the crops are successful, the yield of cocoons would be 375 lbs. on an average. Hence cost of production of 1 lb. of cocoons amounts to annas five only.

III. Cost of production of Charka silk.

Details of expenditure per working day of eight hours per charka :

			Rs. a. p.	Rs. a. p.
1.	Cost of 21 lbs. of cocoons at 5 annas per lb. ...			6 9 0
2.	Fuel ..	0 10 0		
	Water ...	0 4 0		
	Contingencies ..	0 5 0		1 3 0

(Contingencies include 'Gootum,' personal expenses for sale of silk, transport charges, cost of oil, thread and skein making, steaming of cocoons, etc).

		Rs. a. p.	Rs. a. p.
3.	*Labour for Reeling.*—1 Reeler ..	0 9 0	
	2. Turner ..	0 5 0	0 14 0
4.	Marketing commission on silk ...		0 2 3
5.	Cocoon brokerage ...		0 3 0
6.	Transport of cocoons ...		0 3 0
	Total ..		9 2 3
	Deduct cost of waste.		0 2 3
	Daily production—1½ lbs. of silk: cost of production ..		9 0 0

Cost of production of 1 lb. of silk is Rs. 6.

IV. Cost of production of Domestic Basin Silk.

Details of expenditure per working day of 8 hours—5 Basins.

		Rs.	a.	p.
1.	Cost of 100 lbs. of cocoons at 5 annas per lb.	31	4	0
2.	Fuel .. 1 0 0			
	Water .. 0 10 0			
	Contingencies ... 0 6 0	2	0	0
3.	*Labour for Reeling.*—			
	5 Reelers ... 2 8 0			
	3 Cookers .. 0 12 0			
	Turner ... 0 8 0	3	12	0
4.	Marketing commission on sale of silk ..	0	7	6
5.	Cocoon brokerage	1	0	0
6.	Transport of cocoons	1	0	0
7.	Miscellaneous—including oil, rent, railway freight, personal expenses for sales.	1	0	0
	Daily yield—5 lbs. of 28/30 silk and 3 lbs. of silk waste.	40	7	6
	Deduct cost of 3 lbs. of silk waste at 6 annas per lb.	1	2	0
	Cost of production of 5 lbs. of silk	39	5	6
	Cost of production per lb. of silk	7	14	0

V. Cost of production of Filature silk 2^{9}/30 denier.

Details of expenditure per working day of 9 hours—12 Basins.

		Rs.	a.	p.
1.	Cost of 260 lbs. of cocoons at 5 annas per lb.	81	4	0
2.	Stifling and other charges	10	4	0
3.	*Reeling charges.*—12 Reelers ... 6 0 0			
	12 Cookers ... 3 0 0			
	3 Knotters ... 0 12 0			
	1 Examiner ... 0 6 0			
	1 Skeiner 0 7 6			
	2 Waste preparers .. 0 8 0	11	1	6
4.	Coal and Fuel	0	0	
5.	Water and power charges	2	4	0
6.	Oil waste, etc.	0	12	0
7.	Indirect charges	8	4	0
	Daily yield—13½ lbs. of silk and 9 lbs. of waste ...	122	13	6
	Deduct 9 lbs. of waste at 8 annas per lb. ..	4	8	0
	Cost of production of 13½ lbs. of silk	118	5	6
	Cost of production of 1 lb. of silk in Government Filature.	8	12	0

ANNEXURE II.

General index numbers of Wholesale Prices of all commodities and raw silk.

Month	1919		1920		1921		1922		1923		1924		1925	
	A.	B.	A.	B.	A.	B.	A.	B.	A.	B.	A.	B.	A.	B.
January	173	108	202	146	170	157	169	160	171	166	179	149	171	113
February	188	139	203	180	162	144	167	162	166	163	179	163	171	115
March	197	120	194	160	161	137	173	165	165	165	180	171	170	116
April	194	118	191	165	160	145	173	164	165	162	180	176	168	117
May	195	139	193	173	163	138	175	190	162	163	180	168	168	102
June	204	148	194	164	171	146	176	204	166	171	184	174	168	105
July	204	150	187	154	174	159	180	188	167	170	183	165	168	105
August	198	146	186	171	174	167	178	192	169	163	184	129	168	106
September	194	143	180	186	172	160	174	184	170	165	183	126	166	111
October	183	143	179	158	174	144	172	178	170	151	182	130	164	107
November	187	143	184	155	175	156	172	169	176	149	183	130	163	110
December	192	143	178	161	172	166	175	165	184	151	179	123	160	111

Month	1926		1927		1928		1929		1930		1931		1932	
	A.	B.	A.	B.	A.	B.	A.	B.	A.	B.	A.	B.	A.	B.
January	152	109	154	115	153	115	158	109	149	100	113	77	109	94
February	148	112	155	134	154	110	156	115	145	100	109	74	111	90
March	148	114	157	124	156	99	153	110	142	98	108	70	112	90
April	147	124	155	126	155	99	153	108	141	97	107	69	110	87
May	149	135	158	130	157	100	149	105	142	99	106	66	109	75
June	154	140	162	129	159	98	149	102	141	98	104	66	108	66
July	159	119	163	114	161	100	149	100	136	85	108	62	108	66
August	157	114	159	112	161	96	149	100	130	76	109	59	108	63
September	154	119	160	114	160	91	152	99	127	69	107	59	107	64
October	153	110	163	104	165	99	153	98	126	65	107	64		
November	153	105	164	108	161	99	151	96	121	58	111	78		
December	155	108	160	113	157	102	150	100	117	62	110	92		

NOTE.—In Column 'A' General Index Numbers of prices of all commodities at Bangalore are given
In Column 'B' Index Numbers of prices of raw silk at Bangalore are given.
1913-14 is taken as the Base year.
Prices in 1913–14 are taken as equivalent to 100.

ANNEXURE III.

Statement showing the export of silk and silk waste from Mysore during each year since 1915-1916.

Year	Silk		Silk Waste		Total value in lakhs
	Quantity in lbs.	Value in lakhs	Quantity in lbs.	Value in lakhs	
		Rs.		Rs.	Rs.
1915–16	378,102	25·90	308,484	0·82	26·72
1916–17	379,004	30·70	401,800	3·30	34·00
1917–18	377,282	35·40	75,932	0·70	36·10
1918–19	540,462	50·90	244,195	2·60	53·50
1919–20	521,110	59·60	721,764	8·90	68·50
1920–21	296,922	37·20	550,220	6·90	44·10
1921–22	638,780	77·90	549,318	5·90	83·80
1922–23	622,052	83·50	419,020	4·10	87·60
1923–24	895,276	100·82	619,674	6.04	106·86
1924–25	770,964	70·73	736,032	6·28	77·01
1925–26	930,618	75·33	692,654	5·07	82·40
1926–27	746,692	66·87	613,278	6·10	72·97
1927–28	670,760	58.01	480,848	2·25	60·26
1928–29	619,650	52·30	493,394	2·50	54·80
1929–30	552,844	42·68	462,890	2·27	44·95
1930–31	383,440	23·13	234,720	0·59	23·72
1931–32	367,440	22·20	266,560	0·67	22·87

WD 1410—GPB—150—13-1-33

Seri. 56-33-10

Tels.—"INDUSCOM"

Codes used—A.B.C., 5th Edn., Bentleys.

GOVERNMENT OF MYSORE.

Department of Industries and Commerce.

3125

Mr. A. V. RAMANATHAN, B.A.,
~~Mr. N. RAMA RAO, B.A., B.L.,~~
Director.

OFFICE OF THE DIRECTOR.

D. O. No. D4-232/33-34/Income. *Bangalore, dated* 21st February *193* 4.

My dear Wajid,

In reply to your D.O. letter No.D.4040 dated the 19th Feby. 1934 regarding the inclusion of Sericulture under the Imperial Council of Agricultural Research, I send enclosed a revised draft which I submitted today to the Member in person and which he said ~~may~~ might be sent up for his consideration.

Yours sincerely,
A V Ramanathan

S. Abdul Wajid, Esq., B.A.,
Secretary to the Government of Mysore,
Development Department, Bangalore.

AVR:KS)

3 copies

The Vice Chairman,
Imperial Council of Agricultural Research,
New Delhi.

Sir,

Subject:— Inclusion of Sericulture in the scope of the work of the Imperial Cl of Agri. Research

I am directed to state that the Provincial Sericultural Conference held at Channapatna on the 26th Novr. 1933, passed the following resolution -

"This Conference requests the Government of India to include Sericulture in the subjects of research in the Imperial Council of Agricultural Research".

The report of the Indian Tariff Board regarding the grant of protection to the Sericulture Industry which has been recently published, emphasises also the need for bringing Sericulture within the scope of work of the Imperial Council of Agricultural Research (vide paragraphs 41, 167, 189, 200 and 201 of that Report).

In the light of ~~the Tariff Board~~ That Report which gives a clear idea of the history, the present position and the future requirements of the ~~Sericulture~~ Industry, it is ~~unnecessary for me~~ hardly necessary to explain ~~to state~~ in detail the necessity for the action proposed above and the wide field that exists for research and future development under the guidance of the Imperial Council of Agricultural Research. A considerable amount of research is necessary in regard to the cultivation of mulberry, improvement

improvement of the race of silk-worm, eliminating losses in rearing, improving the efficiency in reeling methods, standardising the silk by establishing conditioning houses and improvement in the method and system of marketing. As the Tariff Board has recommended and the Textile Protection Amendment Bill proposes protection only for a short period of five years, urgent action on these lines is necessary. The Government of Mysore will ~~take every step to~~ co-operate with your Council for work in all these directions. I request that you will kindly take necessary action urgently in the matter of bringing Sericulture within the scope of the activities of your Council.

I have etc.,

SECRETARY.

Appendix F G—1]

SUBJECT .....

.....

.....

Section Seri

File No. 56-33

Serial No. -13-

No. Dy-4564

To The Dir. Ht

Diary No. of letter replied to .....

General and Revenue Secretariat

( ) Dear Sir,

the *193* .

Date of issue 12/12/33

Signed by K. S. Bajwa

With refer. to your letter no. Dy-232-33 § 3-2-34, communicating the Resolutions passed by the Provincial Seri. Conference on 26.11.33 that Seri. might be included among the subjects that are receiving the continuous attention of the Imperial Council of Agri. Research, and submitting a draft of a letter to the chairman of that Institution, I am desired to request you to make it convenient

List of enclosures .....

Copied by .....

Examined by .....

wants to speak [illegible]

Member of Council about this

subject in his chambers in the public

offices on any working day. yrs

W

15

16th February 1934.

Dear Sir,

With reference to your letter No.D_4-232-33 dated 3rd February 1934 communicating the Resolution passed by the Provincial Sericultural Conference on 26th November 1933 that Sericulture might be included among the subjects that are receiving the continuous attention of the Imperial -- Council of Agricultural Research, and submitting a draft of a letter to the Vice Chairman of that Institution, I am desired to request you to make it convenient to speak to the First Member of Council about this subject in his -- Chambers in the Public Offices on any working day.

Yours sincerely,

Sd. S. Abdul Wajid.

Fair draft

A.V.Ramanathan, Esq., B.A.,
Director of Industries and Commerce in Mysore.

GOVERNMENT OF HIS HIGHNESS THE MAHARAJA OF MYSORE

General and Revenue Secretariat

No. D 4610 / Seri. 58-33-13 Bangalore, Dated 26th March 1934

From

The *Secretary to the Government of His Highness the Maharaja of Mysore, Development Department.*

Bangalore.

To

The Vice Chairman,
Imperial Council of Agricultural Research,
NEW DELHI.

~~Sir,~~

Subject:- Inclusion of Sericulture in the scope of work of the Imperial Council of Agricultural Research.

Sir,

I am directed to state that the Provincial Sericultural Conference held at Channapatna on the 26th November 1933, passed the following resolution -

"This Conference requests the Government of India to include Sericulture in the subjects of research in the Imperial Council of Agricultural Research".

The report of the Indian Tariff Board regarding the grant of protection to the Sericulture Industry which has been recently published, emphasises also the need for bringing Sericulture within the scope of work of the Imperial Council of Agricultural Research (vide paragraphs 41, 167, 189, 200 and 201 of that Report).

In the light of that Report which gives a clear idea of the history, the present position, and the future requirements of the Industry, it is hardly necessary to explain in detail the necessity for the action proposed above and the wide field that exists for research and future development, under the guidance of the Imperial Council of Agricultural Research. A considerable amount of research is necessary in regard to the cultivation of mulberry, improvement of the race of silk-worm, eliminating losses

in rearing, improving the efficiency in reeling methods, standardising the silk by establishing conditioning houses and improvement in the method and system of marketing. As the Tariff Board has recommended and the Textile Protection Amendment Bill proposes protection only for a short period of five years, urgent action on these lines is necessary. The Government of Mysore will be ~~glad~~ glad to co-operate with your Council for work in all these directions. I am to request that you will kindly take necessary action urgently in the matter of bringing Sericulture within the scope of the activities of your Council.

I have the honour to be,

Sir,

Your most obedient servant,

Secretary to Government,
Development Department.

570
GEN. & REV. SECRETARIAT
8 AUG. 1934
DEVELOPMENT BRANCH.

No.D.2747/34/A.

Imperial Council of Agricultural Research.

Simla S.W., the 4th August 1934.

Seri. 56-33-15

From

Rai Sahib Malik Charan Das,
Secretary.

To

The Secretary to the Government of
His Highness the Maharaja of Mysore,
Development Department,
Bangalore.

DEVELOPMENT SECRETARIAT
Agro
8 AUG. 1934

.....

Inclusion of sericulture in the scope of work of the Imperial Council of Agricultural Research.

.....

Sir,

I am directed to refer to your letter No. 4610/Seri ~~Agri~~-56-33-13 dated the 26th March 1934 on the subject mentioned above. The whole question of coordinating sericultural research in the Indian States and Provinces was considered at the recent Industries Conference held at Simla, at which the Government of Mysore was also represented. The conclusion which that Conference arrived at was that an Imperial Sericultural Committee should be appointed and that such a Committee should form part of the Advisory Council of the Industrial Intelligence and Research Bureau so as to acquire a definite status as part of that organisation. The Conference was further of opinion that the subject of sericulture should, in all provinces, be placed under the Provincial Directors of Industries (or Provincial Officers in charge of industries).

In the circumstances mentioned above, I am directed to express regret that sericulture cannot

be brought within the scope of the Imperial Council of Agricultural Research though the Council would be represented on the proposed Sericultural Committee by its Animal Husbandry Expert and would be ready to offer advice whenever required.

I have the honour to be,
Sir,
Your most obedient servant,

Secretary.